

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

(12) UK Patent Application (19) GB (11) 2 268 399 (13) A

(43) Date of A Publication 12.01.1994

(21) Application No 9214376.7

(22) Date of Filing 07.07.1992

(71) Applicant(s)

Anthony Morris Copp
Copperfields, The Ridge, Cold Ash, NEWBURY,
RG16 9HX, United Kingdom

(72) Inventor(s)

Anthony Morris Copp

(74) Agent and/or Address for Service

Stevenson & Schulman
15 Station Road, READING, Berkshire, RG1 1LG,
United Kingdom

(51) INT CL⁵

A47G 27/02, A47L 23/22

(52) UK CL (Edition M)

A4S S1F S1N

(56) Documents Cited

EP 0359478 A2 US 5114774 A

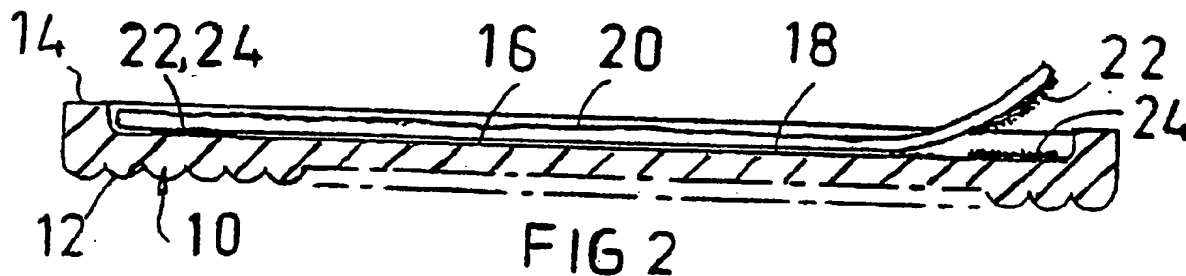
(58) Field of Search

UK CL (Edition L) A4S S1F S1J S1N
INT CL⁵ A47G 27/02, A47L 23/00

(54) Safety mats with replaceable absorbent upper member

(57) The invention relates to a safety mat for supporting a user in a wet environment. The safety mat consists of a flat base member (10) of strong flexible waterproof material, having a non-slip surface (12) on its underside, and an upper member (20) of absorbent material for overlying the substantially flat upper surface of the base member, and attachment means (22, 24), preferably in the form of strips of hook and loop fastener material, for removably attaching the upper member to the base member. Preferably the base member is formed with an upstanding rim (14) defining within it a well (16) in which the upper member is accommodated.

The mats can be used for example in sports centres, schools, swimming pools, hospitals and the like or by an old person in a wet environment such as a bathroom. They are particularly hygienic since the absorbent removable upper members can be frequently replaced and dirty ones washed while the non-absorbent base members can be washed and disinfected.



GB 2 268 399 A

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

1/1

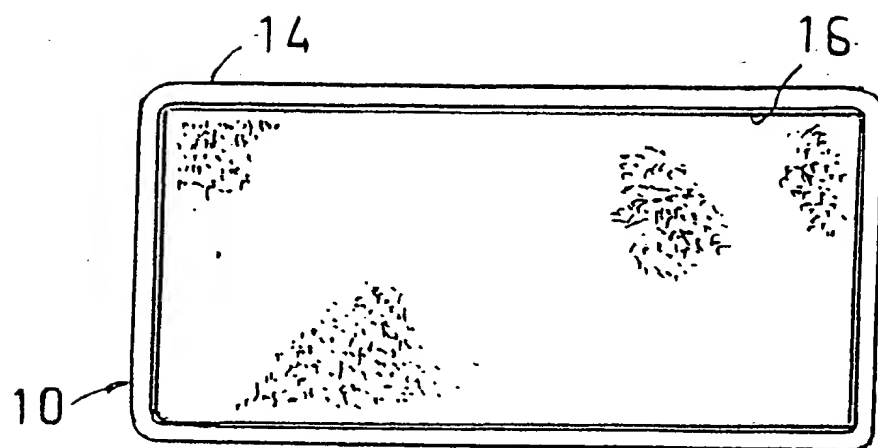


FIG 1

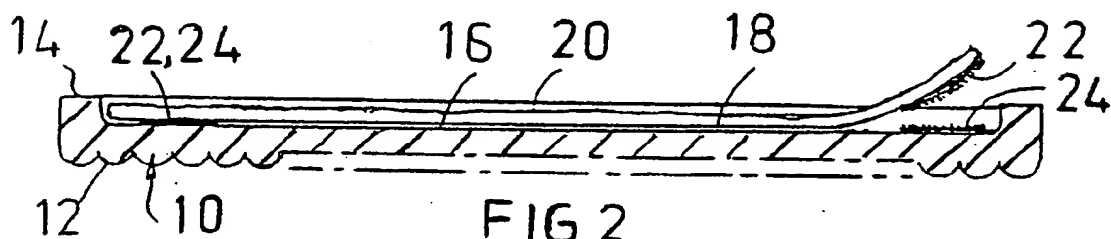


FIG 2

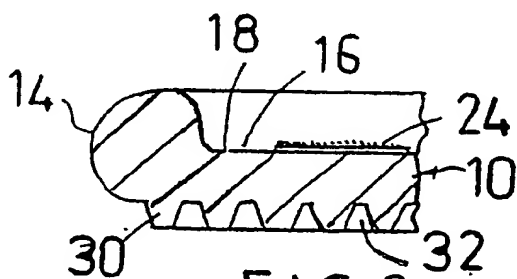


FIG 3

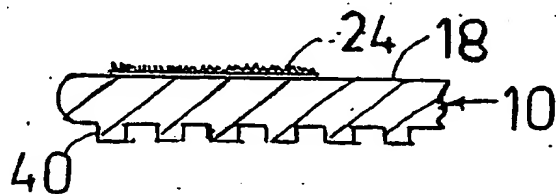


FIG 4

2268399

SAFETY MATS

This invention relates to safety mats for supporting a user in a wet environment, for example in changing rooms, showers, bathrooms and so on.

According to the invention, a safety mat for supporting a user in a wet environment comprises a base member of a waterproof material having a non-slip surface on its underside and a substantially flat upper surface, an upper member of absorbent material for overlying the base member, and attachment means for removably attaching the upper member to the base member.

The base member can be made to be sturdy enough to support the weight of the user and prevent any movement along the floor on which it is placed, while the removable upper member, which may typically be of a towelling material, provides a surface which is soft and comfortable for the user's feet. More particularly, the mat may be provided with a number of upper members, so that when one of these has been used and is wet and/or dirty, it may be replaced with a fresh one. The upper member, which will be referred to in this description as a "towelling mat", not to be confused with the mat as a whole and not to be taken as restricting its material to towelling, can be relatively cheap.

Some safety mats in accordance with the invention will now be described, by way of example only and with reference to the accompanying drawings, in which:-

Figure 1 is a top plan view of a typical mat according to the invention;

Figure 2 is a horizontal cross section on a larger scale through the mat; and

Figures 3 and 4, on a still larger scale, are scrap views showing modified versions in horizontal cross section.

The mat shown in Figures 1 and 2 consists of a flat base member 10, which is made of a strong, flexible, waterproof material such as a rubber or a suitable plastics material. Preferably the base member is of the kind comprising a foamed core with an impervious skin enclosing the core, so that it is waterproof but at the same time as light as possible while having sufficient mechanical strength for its purposes. The underside of the base member 10 is formed with a non-slip surface 12, which in Figure 2 consists of a series of transverse ribs. The base has an upstanding peripheral rim 14, defining a well 16 within it. The well has a substantially flat upper surface 18, in which an upper member 20 is laid.

The upper member 20 is a simple mat of absorbent material, typically towelling. However, attached to one side of the towelling mat 20 are strips 22 of a hook and loop fastener material. In Figure 2, one end of the towelling mat 20 is shown lifted, so as to show one of the strips 22. Further strips 24 of the same material are permanently secured adhesively on the flat upper surface 18 of the base member 10, so as to engage the strips 22 and thereby secure the towelling mat 20 removably to the base member 10. The mat is preferably supplied with a set of towelling mats 20, so that they can be changed for washing and drying as and when required.

The base member 10 is preferably of a flexible material so that it can be rolled up and carried. It may be provided

with straps or other suitable fastening means (not shown), for securing it in a rolled up condition.

The hook and loop fasteners 22 and 24 may for example be of the kind sold under the Trade Mark VELCRO.

As shown in Figures 1 and 2, the rim 14 has a flat top and a vertical outer surface. It may however take any suitable form, and Figure 3 shows it as a curved or beaded rim. The rim may be styled so as to have a distinctive appearance, carrying for example a trade mark or other distinctive patterning.

On the other hand, the rim 14 may be omitted altogether, as shown in Figure 4, in which the well 16 is therefore absent. This rimless form of mat is easier to roll up and carry.

Similarly, the non-slip surface on the underside of the base member 10 may take any suitable form, and Figures 3 and 4 show two possible alternative forms of this surface. In Figure 3, it consists of a grid of transverse ribs 30 and longitudinal ribs 32, while in Figure 4, it consists of a multiplicity of integral studs 40.

It will be realised from the foregoing that the base member 10 may be relatively rigid rather than flexible, if it is not intended to be rolled up and carried when not in use.

Mats according to the invention may be in any shape or size desired, and will find a large number of uses, for example in sports centres, schools, swimming pools, hospitals, and in camping and caravanning contexts. They are also particularly useful for providing a firm and safe support for an old person in a wet environment such as a bathroom, whether at home or in an institutional environment.

The non-slip surface may consist of an added layer of a suitable non-friction material applied on the underside of the base member 10. Finally, the attachment means for removably attaching the towelling mat to the base member may take any suitable form, hook and loop fasteners being only one example.

CLAIMS

1. A safety mat for supporting a user in a wet environment comprising a base member of a waterproof material having a non-slip surface on its underside and a substantially flat upper surface, an upper member of absorbent material for overlying the base member, and attachment means for removably attaching the upper member to the base member.
2. A mat according to claim 1 including a plurality of replacement upper members each having an attachment means ^{for} removably attaching it to the base member.
3. A mat according to claim 1 or claim 2 in which the base member is flexible so that it can be rolled up.
4. A mat according to any of claims 1 to 3 in which the base member is formed with a foamed core enclosed within a water impervious skin.
5. A mat according to any of claims 1 to 4 in which the non-slip surface includes ribs or studs.
6. A mat according to any of claims 1 to 5 in which the base has an upstanding peripheral rim, defining a well within it to accommodate the upper member.
7. A mat according to any of claims 1 to 6 in which the upper member is formed of towelling material.
8. A mat according to any of claims 1 to 7 in which the attachment means comprise strips of hook and loop fastener material, one attached to each of the base member and upper member at corresponding positions.
9. A safety mat substantially as described herewith with reference to or as illustrated in any of the Figures of the accompanying drawings.

Patents Act 1977
Examiner's report to the Comptroller and
Section 17 (The Search Report)

Application number

GB 9214376.7

Relevant Technical fields

- (i) UK Cl (Edition L) A4S (S1F, S1J, S1N)
(ii) Int Cl (Edition 5) A47G 27/02, A47L 23/00

Search Examiner

S J QUICK

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

24 SEPTEMBER 1993

Documents considered relevant following a search in respect of claims 1-9

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	EP 0359478 A2 (KIMBERLY-CLARK) - 21.03.90, see whole document, especially columns 1 (lines 14-17, 24-27 and 43-54), 4 (lines 44-48 and 55-58) and 6 (lines 8-21)	1-9
X	US 5114774 (MAXIM SORBENTS) - 19.05.92, see whole document, especially columns 1 (lines 55-68), 2 (lines 1-11 and 68) and 3 (lines 1-23)	1-9

Category	Identity of document and relevant passages	Relevant to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).